WHAT IS CLAIMED IS:

1. A grinding tool comprising:

a tool base having a surface set to have a first color; and

a plurality of abrasive grains discretely provided on the surface of the tool base and formed so that at least a surface of each abrasive grain is set to have a second color different from the first color.

2. The grinding tool according to claim 1, wherein at least one of the tool base and each of the abrasive grains is coated with a coloring agent so that the surface of the abrasive grains is colored differently from the surface of the tool base.

3. The grinding tool according to claim 1, wherein at least one of the tool base and each of the abrasive grains is mixed with a coloring additive so that the surface of the abrasive grain is colored differently from the surface of the tool base.

4. The grinding tool according to claim 1, 2, or 3 wherein the color of the surfaces of the abrasive grains is set to have a density differing from that of the color of the surface of the base by a predetermined or larger amount.

5. An inspection method for inspecting conditions of a grinding surface of a grinding tool, the grinding surface comprising a surface of a tool base on which a large number of abrasive grains are discretely

formed, the inspection method comprising:

a step of setting a color difference between the surface of the tool base and a surface of each of the abrasive grains on the grinding surface;

a step of picking up an image of the grinding surface for which the color difference has been set, to obtain image data;

a step of subjecting the image data obtained to image processing on the basis of the color difference so as to emphasize a difference between data indicating the surface of the abrasive grains and data indicating the surface of the tool base, both data being contained in the image data; and

a step of outputting the image data that has been subjected to the image processing.

6. The inspection method according to claim 5, wherein the step of subjecting the image data to the image processing comprises:

a step of detecting a density distribution of the image data obtained;

a step of setting a binarization threshold on the basis of the detected density distribution; and

a step of binarizing the obtained image data on the basis of the set binarization threshold.

7. The inspection method according to claim 5, wherein the step of subjecting the image data to the image processing comprises:

a step of converting the image data on the grinding surface into digital data; and

a step of deleting lower predetermined bits from the digital image data obtained by the conversion.

8. The inspection method according to claim 5, further comprising:

a step of calculating numerical data indicating at least one of the distribution density of the abrasive grains and the shape and size of each of the abrasive grains on the basis of the image data that has been subjected to the image processing.

9. The inspection method according to claim 5, further comprising:

a step of comparing the calculated numerical data with thresholds preset to determine quality of the grinding surface; and

a step of outputting a result of the comparison.

10. The inspection method according to claim 5, wherein the step of setting the color difference comprises:

a step of applying a coloring agent to the grinding surface, the coloring agent having a color different from that of the surface of each abrasive grain; and

a step of removing only those portions of the coloring agent applied to the grinding surface which are located on the surfaces of the abrasive grains, to

expose the surfaces of the abrasive grains.

11. The inspection method according to claim 10, wherein the step of removing the coloring agent only from the surfaces of the abrasive grains comprises abutting the grinding surface to which the coloring agent has been applied, against a false workpiece for grinding work to remove the coloring agent only from the surfaces of the abrasive grains actually involved in the grinding work.

12. The inspection method according to claim 5, wherein the step of setting the color difference comprises:

a step of applying a coloring agent of a first color to the grinding surface; and

a step of changing a color developed by those portions of the coloring agent applied to the grinding surface which are located on the surfaces of the abrasive grains, to a second color.

13. An inspection apparatus for inspection conditions of a grinding surface of a grinding tool, the grinding surface comprising a surface of a tool base on which a large number of abrasive grains are discretely formed, the inspection apparatus comprising:

means for setting a color difference between the surface of the tool base and a surface of each of the abrasive grains on the grinding surface;

a camera which picks up an image of the grinding

surface for which the color difference has been set, to output image data obtained;

means for subjecting the image data outputted by the camera on the basis of the color difference so as to emphasize a difference between data indicating the surface of the abrasive grain and data indicating the surface of the tool base, both data being contained in the image data; and

means for outputting the image data that has been subjected to the image processing.

14. The inspection apparatus according to claim 13, wherein the means for subjecting the image data to the image processing comprises:

means for storing the image data outputted by the camera;

means for detecting a density distribution of the stored image data;

means for setting a binarization threshold on the basis of the detected density distribution; and

means for binarizing the stored image data on the basis of the set binarization threshold.

15. The inspection apparatus according to claim 13, wherein the means for subjecting the image data to the image processing comprises:

means for converting the image data on the grinding surface into digital data; and

means for deleting lower predetermined bits from

the digital image data obtained by the conversion.

16. The inspection apparatus according to claim 13, further comprising:

means for calculating numerical data indicating at least one of the distribution density of the abrasive grains and the shape and size of each of the abrasive grains on the basis of the image data that has been subjected to the image processing.

17. The inspection apparatus according to claim 16, further comprising:

means for comparing the calculated numerical data with thresholds preset to determine quality of the grinding surface; and

means for outputting a result of the comparison.

18. The inspection method according to claim 13, wherein the means for setting the color difference comprises:

means for applying a coloring agent to the grinding surface, the coloring agent having a color different from that of the surface of each abrasive grains; and

means for removing only those portions of the coloring agent applied to the grinding surface which are located on the surfaces of the abrasive grains, to expose the surfaces of the abrasive grains.

19. The inspection apparatus according to claim 13, wherein the means for removing the coloring

agent only from the surfaces of the abrasive grains comprises abutting the grinding surface to which the coloring agent has been applied, against a false workpiece for grinding work to remove the coloring agent only from the surfaces of the abrasive grains actually involved in the grinding work.

20. The inspection apparatus according to claim 13, wherein the means for setting the color difference comprises:

means for applying a coloring agent of a first color to the grinding surface; and

means for changing a color developed by those portions of the coloring agent applied to the grinding surface which are located on the surfaces of the abrasive grains, to a second color.